

**Remarks/Arguments:**

**I. Status of the Claims**

Claims 1-18 currently are withdrawn from consideration, in view of a Restriction Requirement. Claims 19, 20 and 25 are amended herein. As a result, claims 19-27 remain pending and under examination.

Support for the amendment to claim 19 is found throughout the application as filed, including at page 8, next to last paragraph, and Figures 1 and 2. Support for the amendment to claim 20 is found throughout the application as filed, including in Figure 11 (which corresponds to Embodiment 5, described beginning on page 31 of the application). Support for the amendment to claim 25 is found throughout the application as filed, including in Figure 21 (which corresponds to Embodiment 12, described beginning on page 47 of the application). No new matter has been introduced.

**II. Claim Rejections under 35 U.S.C. § 112**

Applicants traverse the rejection of claims 20 and 25 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. Reconsideration and withdrawal of the rejection are respectfully requested in view of the claim amendments and the following remarks.

The phrase "with the resin film and the metal foil alternately" in claim 20, which was considered by the Examiner to have an unclear meaning, has been replaced by the phrase "wherein the at least two layers of the resin film and the at least two layers of the metal foil are arranged alternately in the protection layer," with the claim also being amended to provide proper antecedent basis for the at least two layers of the resin film and the at least two layers of the metal foil.

Claim 25 has been amended to recite an embodiment of the invention wherein the metal foil of the protection layer is formed as a gas-barrier layer. In this embodiment, there need not be a gas-barrier layer present in the envelope material.

III. Claim Rejections under 35 U.S.C. § 103

A. Claims 19, 20, 22, 23 and 25-27

Applicants traverse the rejection of claims 19, 20, 22, 23 and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over Takematsu (JP 2003-271044; hereinafter "the Takematsu reference") in view of Sasaki et al. (US 4,076,889; hereinafter "the Sasaki reference"). Reconsideration and withdrawal of the rejection are respectfully requested in view of the claim amendments and arguments presented herein.

Applicants' invention, as reflected in claim 19, relates to a vacuum heat-insulating material comprising:

a core material; and

an envelope material covering the core material;

wherein the envelope material has an interior reduced in pressure, the envelope material having a lamination structure having a thermal bonding layer, a gas-barrier layer and a protection layer having a radiation-heat-conduction suppressivity;

the protection layer using the film for suppressing conduction of radiation heat of claim 1, the infrared-ray-reflection layer being a metal foil, wherein the adhesive layer of the protection layer has a bonding area which laminates together the resin film and the infrared-ray-reflection layer and a non-bonding area which does not laminate together the resin film and the infrared-ray-reflection layer.

Claim 1, which is not currently under examination but is referenced in claim 19, is directed to a film for suppressing conduction of radiation heat comprising:

a resin film having at least an infrared-ray absorptivity of lower than 25%;

an infrared-ray-reflection layer; and

an adhesive layer;

wherein an infrared-ray reflectivity is 50% or higher.

The feature "the adhesive layer of the protection layer has a bonding area which laminates together the resin film and the infrared-ray-reflection layer and a non-bonding area which does not laminate together the resin film and the infrared-ray-reflection layer" which is recited in amended claim 19 is not taught or suggested in either of the references relied on by the Examiner in rejecting claim 19 (and claims 20, 22, 23 and 25-27, which depend from claim 19 and thus also include such feature). Nor does the Office Action provide the required clear articulation of the reason(s) why the claimed invention (including such feature) would have been obvious. Thus, a proper *prima facie* case of obviousness under 35 U.S.C. § 103 has not been established.

Further, Applicants note that they have discovered that the aforementioned feature imparts certain benefits and advantages to the film and a vacuum heat-insulating material comprising such film, as explained at page 12 through page 15 of the application (Embodiment 1).

B. Claim 21

Applicants traverse the rejection of claim 21 under 35 U.S.C. § 103(a) as being unpatentable over the Takematsu and Sasaki references in further view of Ishimaru (US 5,714,272; hereinafter "the Ishimaru reference"). Reconsideration and withdrawal of the rejection are respectfully requested in view of the claim amendments and arguments presented herein.

Claim 21 depends from claim 19 and thus, like claim 19, includes the feature "the adhesive layer of the protection layer has a bonding area which laminates together the resin film and the infrared-ray-reflection layer and a non-bonding area which does not laminate together the resin film and the infrared-ray-reflection layer." As previously discussed, neither the Takematsu reference or the Sasaki reference discloses or suggests such a feature. The Ishimaru reference fails to cure this deficiency. Accordingly, Applicants assert that the Examiner has not met the burden of establishing *prima facie* obviousness, as required by law.

C. Claim 24

Applicants traverse the rejection of claim 24 under 35 U.S.C. § 103(a) as being unpatentable over the Takematsu and Sasaki references in further view of Urata et al. (US 2003/0134078; hereinafter "the Urata reference"). Reconsideration and withdrawal of the rejection are respectfully requested in view of the claim amendments and arguments presented herein.

Claim 24 depends from claim 19 and thus, like claim 19, includes the feature "the adhesive layer of the protection layer has a bonding area which laminates together the resin film and the infrared-ray-reflection layer and a non-bonding area which does not laminate together the resin film and the infrared-ray-reflection layer." As previously discussed, neither the Takematsu reference or the Sasaki reference discloses or suggests such a feature. The Urata reference fails to cure this deficiency. Accordingly, Applicants assert that the Examiner has not met the burden of establishing *prima facie* obviousness, as required by law.

IV. Summary Remarks

Applicants respectfully submit that the application is in condition for allowance and early and favorable action thereon is requested. If any issues remain, the Examiner is invited to contact Applicants' legal representative at the telephone number listed below.

Respectfully submitted,

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